

MEMORANDUM

To: Grant Smith, CAC
From: Chris Cook, E3 Energy Services
Date: Wednesday, July 09, 2003
Subject: Indiana Utility Regulatory Commission proposed Net Metering Rule

Generally the proposed rule is very clean and addresses most, if not all, of the typical barriers found in some net metering proposals.

Some changes I would suggest are:

- Section 5(b) strike the date on the UL 1741 standard. UL is in the process of updating 1741 to accommodate the new IEEE 1547 DG standards and small generator manufacturers can be expected to submit approval under the most current UL standard, not a dated version. In the future, this could cause problems as no equipment would be UL listed to the 1999 version of their 1741 standard.
- Section 5(d)(1) add “equipment” so it reads “Install additional controls or equipment; or”
- In the metering section (Sec. 6(a)(1)) I would add the words “the bi-directional flow of electricity and ” to the middle of that section so it reads “One main watt-hour meter capable of measuring the bi-directional flow of electricity and net kilowatt hours (kWh), or”
- In section 7, I would clarify that the credit is in kWh so no customer makes the claim that they deserve a monetary credit. Keeping the credit as a kWh credit puts the net metering rule squarely within the confines of FERC’s MidAmerican decision and avoids any PURPA challenges to the rule.
- In section 9 it might be good to have sample tariff procedures delineated so that the steps a customer must follow to interconnect under net metering are clear and the time for approval/denial is also clear. For example, in Virginia a customer submits an application with the name of the electrician who will perform the installation (note that an electrician cannot certify a proper installation on the application form since the system has not yet been installed). If the utility has a concern about the proposed installation it must respond within 30 days or the customer can proceed with the installation (I would shorten this to 10-15 business days). When the installation is complete, the electrician submits a statement confirming the installation was completed according to code.

The specific procedures could wait for the actual tariffs and might be better there than in the rule.

Indiana Net Metering Proposed Rule Draft 1

June 13, 2003

Rule X. Net Metering

170 IAC X-1 Definitions

Sec. 1. (a) As used in this rule, "commission" means the Indiana utility regulatory commission.

(b) As used in this rule, "customer" means any person, firm, corporation, municipality or other government agency which has agreed, orally or otherwise, to pay for electric service received from a public or municipally owned utility.

(c) As used in this rule, "electric utility" means a public utility or municipally owned utility that owns, operates, or manages an electric plant. (d) As used in this rule, "eligible net metering customer" means a customer that owns and operates a solar, wind, or hydro electrical generating facility that:

- (1) has a nameplate capacity less than or equal to 10 kilowatts (kW);
- (2) is located on the eligible net metering customer's premises; and
- (3) is used primarily to offset all or part of the eligible net metering customer's own electricity requirements.

(e) As used in this rule, "interconnection" or "interconnected" means the physical, parallel connection of a net metering facility with a distribution facility of an electric utility.

(f) As used in this rule, "name plate capacity," means the full-load continuous rating of a generator under specified conditions as designated by the manufacturer.

(g) As used in this rule, "net metering," means measurement of the difference between the electricity that is supplied by the electric utility to an eligible net metering customer and the electricity that is supplied back to the utility by an eligible net metering customer.

(h) As used in this rule "net metering facility" means an arrangement of equipment for the production of electricity from the movement of water or wind, or by photoelectric transformation, which is owned and operated by an eligible net metering customer.

(i) As used in this rule, "parallel" means the designed operation of the net metering facility, interconnection equipment, and electric utility's system where the instantaneous flow of electrical energy may automatically occur in either direction across the interconnection point between the net metering facility and the electrical utility's distribution system.

(j) As used in this rule, "system emergency" means a condition on a utility's system reasonably likely to result in any of the following:

- (1) A significant disruption of service to a customer;
- (2) A substantial deviation from a normal service standard; or
- (3) An endangerment to life or property.

170 IAC X-2 Applicability

Sec. 2. These rules shall apply to any electric utility, subject to the jurisdiction of the commission, which may now or hereafter be engaged in the production, transmission, sale or distribution of electric service and all net metering facilities as defined in 170 IAC X-1 that are interconnected with such utilities.

170 IAC X-3 Exemption

Sec. 3. Net metering facilities shall be exempt from revenue requirement and associated regulation under IC 8-1-2 as administered by the commission, but the commission shall be final authority over rates for purchase and sale of electric energy and capacity in transactions between net metering facilities and electric utilities.

170 IAC X-4 Availability

Sec 4. (a) An electric utility shall offer net metering to, at minimum, residential customers and elementary, middle, and high schools that install a net metering facility. The utility may limit the aggregate amount of net metering facility nameplate capacity under the net metering tariff to 0.1% of the most recent summer peak load of the utility.

170 IAC X-5 Interconnection

Sec 5. (a) A net metering standard interconnection agreement between the electric utility and the eligible net metering customer must be executed before the net metering facility may be interconnected with the electric utility's system.

(b) The net metering facility shall have Underwriters Laboratories certification that it has satisfied the testing requirements of UL 1741.

(c) The eligible net metering customer shall provide the electric utility proof of qualified installation of the net metering facility. Certification by a licensed electrician shall constitute acceptable proof.

(d) An electric utility shall not require an eligible net metering customer, whose net metering facility meets the standards of this subsection, to do any of the following:

- (1) Install additional controls or equipment; or
- (2) Perform or pay for additional tests.

(e) The eligible net metering customer shall install, operate, and maintain the net metering facility in accordance with manufacturer's suggested practices for safe, efficient, and reliable operation in parallel to the electric utility's system.

(f) The electric utility may isolate any net metering facility at its own discretion if the electric utility believes continued interconnection with the net metering facility creates or contributes to a system emergency. System emergencies causing discontinuance of interconnection shall be subject to verification by the commission, at the commission's discretion.

Deleted: dated May 7, 1999.

170 IAC X-6 Metering

Sec 6. (a) One of the following metering options, if not already present, shall be installed on the eligible net metering customer's premises by the utility to properly record the net kilowatt hours of a net metering facility:

- (1) One main watt-hour meter capable of measuring the bi-directional flow of electricity and net kilowatt hours (kWh), or
- (2) One main watt-hour meter measuring kWh to the eligible net metering customer, and a second watt-hour meter measuring kilowatt hours (kWh) to the electric utility. The reading of the second meter will be subtracted from the reading of the main meter to obtain net kilowatt hours (kWh) for billing.

(b) An electric utility shall not charge the eligible net metering customer any costs or fees for:

- (1) Additional metering for single-phase configurations installed at the request of the utility;
- (2) Eligible net metering customer's request to participate in net metering program; or
- (3) Initial net metering facility inspection.

170 IAC X-7 Billing

Sec 7. (a) An electric utility shall determine an eligible net metering customer's monthly bill as follows:

- (1) Bill charges, credits, rates and adjustments shall be in accordance with the utility's tariff and administrative rules that would apply if the eligible net metering customer did not participate in net metering.

(2) The utility shall measure the difference between the amount of electricity delivered by the utility to the eligible net metering customer and the amount of electricity generated by the eligible net metering customer and delivered to the utility during the billing period, in accordance with normal metering practices. If the kilowatt hours (kWh) delivered by the utility to the eligible net metering customer exceeds the kilowatt hours (kWh) delivered by the eligible net metering customer to the utility during the billing period, the eligible net metering customer shall be billed for the kilowatt hours (kWh) difference at the rate applicable to the eligible net metering customer if it was not an eligible net metering customer. If the kWh generated by the eligible net metering customer and delivered to the utility exceeds the kWh supplied by the utility to the eligible net metering customer during the billing period, the eligible net metering customer shall be credited in kWh for the difference in the next billing cycle.

Deleted: for the kWh difference

(3) When the eligible net metering customer elects to no longer participate in the net metering tariff, any unused credit shall revert to the utility.

170 IAC X-8 Liability and Indemnity

Sec 8. (a) Liability insurance: An eligible net metering customer operating a net metering facility shall maintain homeowners, commercial, or other insurance providing coverage in the amount of at least \$100,000 for the liability of the insured against loss arising out of the use of a net metering facility. Eligible net metering customers shall not be required to obtain liability insurance with limits higher than that which is stated in this section; nor shall such eligible net metering customers be required to purchase additional liability insurance where the eligible net metering customer's existing insurance policy provides coverage against loss arising out of the use of a net metering facility by virtue of not explicitly excluding coverage for such loss.

(b) Indemnity: The utility and the eligible net metering customer shall indemnify and hold the other party harmless from and against all claims, liability, damages, and expenses, including attorney's fees, based on any injury to any person, including loss of life, or damage to any property, including loss of use thereof, arising out of, resulting from, or connected with, or that may be alleged to have arisen out of, resulted from, or connected with an act or omission by such other party, its employees, agents, representatives, successors, or assigns in the construction, ownership, operation, or maintenance of such party's facilities used in net metering.

170 IAC X-9 Standard Offer and Reporting Requirements

Sec 9. (a) Within 60 days of the effective date of this rule, all electric utilities shall submit for approval under the commission's thirty (30) day filing process a standard net metering tariff. The standard net metering tariff shall comply with the requirements of this section.

(b) Within 60 days of the effective date of this rule, all electric utilities shall submit for approval via the commission's thirty (30) day filing process a standard interconnection agreement for net metering facilities. The standard interconnection agreement shall include:

- (1) Name of eligible net metering customer;
- (2) Location of proposed net metering facility;
- (3) Type of proposed net metering facility;
- (4) Size and/or inverter power rating of proposed net metering facility;
- (5) Inverter manufacturer and model number; and
- (6) A description of the electrical installation of the inverter and associated electrical equipment.

(c) Within sixty (60) days of the effective date of this rule, and on or before March 1st of each subsequent year, each electric utility shall file with the commission a Net Metering Report. The Net Metering Report shall contain the following items:

- (1) The total number of eligible net metering customers and facilities;
- (2) The number, size and type (solar, wind, hydro) of net metering facilities;

- (3) The number of new eligible net metering customers interconnected during the previous calendar year;
- (4) The number of existing eligible net metering customers that ceased participation in the net metering tariff during the previous calendar year; and
- (5) If available, data on the amount of electricity generated by net metering facilities

170 IAC X-10 Customer complaints

Sec. 10. In the event an electric utility and an eligible net metering customer are unable to agree on matters relating to net metering, either party may raise a customer complaint to the commission in accordance with 170 IAC 4-1-17.